

Learning Objectives:

At the end of this course, students should be able to:

1. understand the basic statistical vocabulary;
2. identify and explicate the statistical concepts;
3. understand different reports, and research articles that use basic descriptive statistics;
4. develop an understanding of univariate analysis; and
5. develop an understanding of bi-variate analysis

Content:**1. Introduction**

- 1.1. Elementary mathematical concepts and notions
- 1.2. , types, matrix inverse, determinants, system of linear equations, Cramer's rule.

2. Basic Statistics

- 2.1. Meaning and Definition of Social Statistics
- 2.2. Use of Statistics in Modern Sociology
- 2.3. Grouped and Un-grouped Data
- 2.4. Statistics: Descriptive and Inductive
- 2.5. Measurement: Nominal, Ordinal and Interval scales
- 2.6. Frequency Distribution: Tabular Organization and Graphic Presentation of Data

3. Measures of Centrality and Location

- 3.1. Mean, Median and Mode
- 3.2. Percentiles, Deciles and Quartiles

4. Measures of Dispersion

- 4.1. Range & Interquartile Range
- 4.2. Mean Deviation
- 4.3. Standard Deviation
- 4.4. Variance

5. The Normal Distribution

- 5.1. Form of the Normal Curve
- 5.2. Area under the Normal Curve

6. Introduction to Bivariate Association

- 6.1. Contingency/bivariate tables
- 6.2. Measures of Association
- 6.3. Nominal measures of association
- 6.4. Ordinal measures of association
- 6.5. Interval/ratio measures of association

Teaching-Learning Strategies:

Teaching will be a combination of class lectures, class discussions, and group work. Short videos/films will be shown on occasion.

Assignments:

The sessional work will be a combination of written assignments, class quizzes, presentations, and class participation/attendance.

Assessments and Examination:

Sr. No.	Elements	Weightage	Details
1.	Midterm Assessment	35%	It is a written examination that takes place at the mid-point of the semester.
2.	Formative Assessment	25%	It is a continuous assessment. It includes variety of activities mentioned above.
3.	Final Assessment	40%	It is a written examination that takes place at the end of the semester.

Suggested Readings

1. Healey, Joseph F. (2012). Statistics: A tool for Social Research. 9th ed. Belmont: Wadsworth (E-Book)
2. Levin, Jack and Fox, James A. (2006). Elementary statistics in social Research. 10th Ed. India Pearson Education.
3. Blalock, H. M. (1988). Social Statistics. 2nd ed. London: McGraw-Hill. Ltd. (International Students Edition)